

**Experiment Number:** 90004-05

**Test Type:** 90-DAY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Propylene glycol mono-t-butyl ether

**CAS Number:** 57018-52-7

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 15:03:27

**First Dose M/F:** NA / NA

**Lab:** BNW

**C Number:** C90004  
**Lock Date:** 08/25/1997  
**Cage Range:** All  
**Date Range:** All  
**Reasons For Removal:** All  
**Removal Date Range:** All  
**Treatment Groups:** All  
**Study Gender:** Both  
**PWG Approval Date** NONE

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First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Male  
CONTROL**

DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

**\*TOTALS****Alimentary System**

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Hepatodiaphragmatic Nodule					X						1
Oral Mucosa	+										1
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

**Cardiovascular System**

Heart	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy							1	1	1		3 1.0

**Endocrine System**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

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1-4 ..Lesion qualified as:

- 1) Minimal    3) Moderate  
2) Mild        4) Marked

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CONTROL**

DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	5	5	5	5	5	5	5	5	5	5
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

**\*TOTALS**

Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	M	+	+	+	M	+	M	7
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

**General Body System**

NONE

**Genital System**

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10

**Hematopoietic System**

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Bronchial	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	+	+	+	+	+	M	+	+	+	+	9
Lymph Node, Mediastinal	M	M	+	+	+	+	+	M	+	+	7
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Granulomatous, Focal					1		1	1	3	1.0	
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10

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Lab: BNW

**F 344/N Rat Male  
CONTROL**

DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	5	5	5	5	5	5	5	5	5	5
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

**Integumentary System**

Mammary Gland	M	+	M	M	M	M	+	+	+	+	5
Skin	+	+	+	+	+	+	+	+	+	+	10

**Musculoskeletal System**

Bone	+	+	+	+	+	+	+	+	+	+	10
------	---	---	---	---	---	---	---	---	---	---	----

**Nervous System**

Brain	+	+	+	+	+	+	+	+	+	+	10
-------	---	---	---	---	---	---	---	---	---	---	----

**Respiratory System**

Larynx	+	+	+	+	+	+	+	+	+	+	10
Lung	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic, Focal	1	1			1						3 1.0
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10

**Special Senses System**

NONE

**Urinary System**

Kidney	+	+	+	+	+	+	+	+	+	+	10
Renal Tubule, Accumulation, Hyaline Droplet	1	1	1	1	1	1	2	2	1	1	10 1.2
Renal Tubule, Regeneration	1	1	1		1	1			1		6 1.0

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CONTROL**

DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
<b>*TOTALS</b>										
Urinary Bladder	+	+	+	+	+	+	+	+	+	10

Urinary Bladder

+

+

+

+

+

+

+

+

+

+

10

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**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Male  
75 PPM**

DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	5	5	5	5	5	5	5	5	5	5
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	2	2	2	2	2	2
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

**Alimentary System**

Liver

+

1

**Cardiovascular System**

NONE

**Endocrine System**

Pituitary Gland

+

1

Cyst

3

1 3.0

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

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M ..Missing tissue

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**Lab:** BNW

**F 344/N Rat Male  
75 PPM**

DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	5	5	5	5	5	5	5	5	5	5
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	2	2	2	2	2	2
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

NONE

**Respiratory System**

Nose

+ + + + + + + + + + 10

**Special Senses System**

NONE

**Urinary System**

Kidney

+ + + + + + + + + + 10

Renal Tubule, Accumulation, Hyaline Droplet 1 1 1 1 1 1 1 1 1 1 10 1.0

Renal Tubule, Regeneration 1 1 1 1 1 1 1 1 1 1 9 1.0

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**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Male  
150 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

NONE

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

Skin

+

1

Inflammation, Suppurative

2

1 2.0

**Musculoskeletal System**

NONE

**Nervous System**

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**Lab:** BNW

**F 344/N Rat Male  
150 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

NONE

**Respiratory System**

Nose

+ + + + + + + + + + 10

**Special Senses System**

NONE

**Urinary System**

Kidney

+ + + + + + + + + + 10

Medulla, Casts Granular

1 1 1 1 1 1 1 1 1 8 1.0

Renal Tubule, Accumulation, Hyaline Droplet

2 2 2 2 2 2 2 2 2 10 2.0

Renal Tubule, Regeneration

1 1 1 1 1 1 1 1 1 10 1.0

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**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Male  
300 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

|               |   |       |
|---------------|---|-------|
| Mesentery     | + | 1     |
| Fat, Necrosis | 2 | 1 2.0 |

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

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**F 344/N Rat Male  
300 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

NONE

**Respiratory System**

Nose

+ + + + + + + + + + 10

**Special Senses System**

NONE

**Urinary System**

Kidney

+ + + + + + + + + + 10

Medulla, Casts Granular

1 1 2 1 1 1 1 7 1.1

Renal Tubule, Accumulation, Hyaline Droplet

2 2 2 2 2 2 2 2 2 10 2.0

Renal Tubule, Regeneration

1 1 1 2 1 1 1 2 2 10 1.3

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**Lab:** BNW

**F 344/N Rat Male  
600 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

Liver

+

1

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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600 PPM

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Respiratory System

|                                      |   |   |   |   |   |   |   |   |   |   |       |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Nose                                 | + | + | + | + | + | + | + | + | + | + | 10    |
| Olfactory Epi, Degeneration, Hyaline | 1 |   | 1 |   |   |   | 1 | 1 |   |   | 4 1.0 |

Special Senses System

NONE

Urinary System

|   |   |   |   |   |   |   |   |   |   |   |        |
|---|---|---|---|---|---|---|---|---|---|---|--------|
| Kidney                                      | + | + | + | + | + | + | + | + | + | + | 10     |
| Medulla, Casts Granular                     | 1 |   | 1 | 1 |   | 1 |   | 1 | 1 |   | 6 1.0  |
| Renal Tubule, Accumulation, Hyaline Droplet | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |   | 10 2.0 |
| Renal Tubule, Regeneration                  | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 10 1.5 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

**Experiment Number:** 90004-05

**Test Type:** 90-DAY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Propylene glycol mono-t-butyl ether

**CAS Number:** 57018-52-7

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 15:03:28

**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Male  
1200 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

|                           |   |   |   |   |   |   |   |   |   |   |    |
|---------------------------|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Rectum   | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Ileum    | + | M | + | + | + | + | + | + | + | + | 9  |
| Intestine Small, Jejunum  | + | + | + | + | + | + | + | + | + | + | 10 |
| Liver                     | + | + | + | + | + | + | + | + | + | + | 10 |
| Mesentery                 | M |   |   |   |   |   |   |   |   |   | 0  |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | 10 |

**Cardiovascular System**

|                |   |   |   |   |   |   |   |   |   |   |       |
|----------------|---|---|---|---|---|---|---|---|---|---|-------|
| Heart          | + | + | + | + | + | + | + | + | + | + | 10    |
| Cardiomyopathy |   |   | 1 |   | 2 |   | 1 |   |   |   | 3 1.3 |

**Endocrine System**

|                    |   |   |   |   |   |   |   |   |   |   |    |
|--------------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex     | + | + | + | + | + | + | + | + | + | + | 10 |
| Adrenal Medulla    | + | + | + | + | + | + | + | + | + | + | 10 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | 10 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 90004-05

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Propylene glycol mono-t-butyl ether

CAS Number: 57018-52-7

Date Report Requested: 10/22/2014

Time Report Requested: 15:03:28

First Dose M/F: NA / NA

Lab: BNW

F 344/N Rat Male  
1200 PPM

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Parathyroid Gland

+ + + + + + + M + M 8

Pituitary Gland

+ + + + + + + + + + 10

Thyroid Gland

+ + + + + + + + + + 10

General Body System

NONE

Genital System

Epididymis

+ + + + + + + + + + 10

Preputial Gland

+ + + + + + + + + + 10

Prostate

+ + + + + + + + + + 10

Seminal Vesicle

+ + + + + + + + + + 10

Testes

+ + + + + + + + + + 10

Hematopoietic System

Bone Marrow

+ + + + + + + + + + 10

Lymph Node, Bronchial

M + + + + + + + + + 9

Lymph Node, Mandibular

+ + + + + + + + + + 10

Lymph Node, Mediastinal

M + + + + M + + M + 7

Lymph Node, Mesenteric

+ + + + + + + + + + 10

Inflammation, Granulomatous, Focal

1 1 2 1.0

Spleen

+ + + + + + + + + + 10

Thymus

+ + + + + + + + + + 10

Integumentary System

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 90004-05

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Propylene glycol mono-t-butyl ether

CAS Number: 57018-52-7

Date Report Requested: 10/22/2014

Time Report Requested: 15:03:28

First Dose M/F: NA / NA

Lab: BNW

F 344/N Rat Male  
1200 PPM

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

Integumentary System

|               |   |   |   |   |   |   |   |   |   |   |    |
|---------------|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | M | + | + | M | + | + | + | + | + | M | 7  |
| Skin          | + | + | + | + | + | + | + | + | + | + | 10 |

Musculoskeletal System

|      |   |   |   |   |   |   |   |   |   |   |    |
|------|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | 10 |
|------|---|---|---|---|---|---|---|---|---|---|----|

Nervous System

|       |   |   |   |   |   |   |   |   |   |   |    |
|-------|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | 10 |
|-------|---|---|---|---|---|---|---|---|---|---|----|

Respiratory System

|                                      |   |   |   |   |   |   |   |   |   |   |       |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Larynx                               | + | + | + | + | + | + | + | + | + | + | 10    |
| Lung                                 | + | + | + | + | + | + | + | + | + | + | 10    |
| Inflammation, Chronic, Focal         | 2 | 1 | 1 |   |   |   | 1 | 1 |   |   | 5 1.2 |
| Nose                                 | + | + | + | + | + | + | + | + | + | + | 10    |
| Olfactory Epi, Degeneration, Hyaline | 1 | 1 | 1 | 1 |   | 1 | 1 | 1 | 1 |   | 8 1.0 |
| Respirat Epith, Hyperplasia          |   |   |   |   |   | 2 |   |   |   |   | 1 2.0 |
| Respirat Epith, Metaplasia, Squamous |   |   |   |   |   | 1 |   |   |   |   | 1 1.0 |
| Trachea                              | + | + | + | + | + | + | + | + | + | + | 10    |

Special Senses System

NONE

Urinary System

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

**Experiment Number:** 90004-05

**Test Type:** 90-DAY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Propylene glycol mono-t-butyl ether

**CAS Number:** 57018-52-7

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 15:03:28

**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Male  
1200 PPM**

| DAY ON TEST                                 |                |   |   |   |   |   |   |   |   |          |
|---|----------------|---|---|---|---|---|---|---|---|----------|
|   | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        |
| ANIMAL ID                                   | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        |
|   | 9              | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9        |
|   | 5              | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5        |
|   | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        |
|   | 1              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1        |
|   | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        |
|   | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1        |
|   | 1              | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0        |
|   | <b>*TOTALS</b> |   |   |   |   |   |   |   |   |          |
| Kidney                                      | +              | + | + | + | + | + | + | + | + | 10       |
| Medulla, Casts Granular                     |                |   | 1 | 1 |   |   | 1 | 1 |   | 4 1.0    |
| Renal Tubule, Accumulation, Hyaline Droplet | 3              | 1 | 2 | 2 | 3 | 3 | 3 | 1 | 3 | 3 10 2.4 |
| Renal Tubule, Regeneration                  | 2              | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 1 10 1.6 |
| Urinary Bladder                             | +              | + | + | + | + | + | + | + | + | 10       |

\*\*\*END OF MALE DATA\*\*\*

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 90004-05

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Propylene glycol mono-t-butyl ether

CAS Number: 57018-52-7

Date Report Requested: 10/22/2014

Time Report Requested: 15:03:28

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
CONTROL**

| DAY ON TEST | 0 0 0 0 0 0 0 0 0 0 |  |  |  |  |  |  |  |  |  |
|-------------|---------------------|--|--|--|--|--|--|--|--|--|
|             | 0 0 0 0 0 0 0 0 0 0 |  |  |  |  |  |  |  |  |  |
| ANIMAL ID   | 9 9 9 9 9 9 9 9 9 9 |  |  |  |  |  |  |  |  |  |
|             | 2 2 2 2 2 2 2 2 2 2 |  |  |  |  |  |  |  |  |  |
|             | 0 0 0 0 0 0 0 0 0 0 |  |  |  |  |  |  |  |  |  |
|             | 0 0 0 0 0 0 0 0 0 0 |  |  |  |  |  |  |  |  |  |
|             | 1 1 1 1 1 1 1 1 1 1 |  |  |  |  |  |  |  |  |  |
|             | 0 0 0 0 0 0 0 0 0 1 |  |  |  |  |  |  |  |  |  |
|             | 1 2 3 4 5 6 7 8 9 0 |  |  |  |  |  |  |  |  |  |

**\*TOTALS****Alimentary System**

|                                    |   |   |   |   |   |   |   |   |   |   |       |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Esophagus                          | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Cecum             | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Colon             | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Rectum            | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Duodenum          | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Ileum             | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Jejunum           | + | + | + | + | + | + | + | + | + | + | 10    |
| Liver                              | + | + | + | + | + | + | + | + | + | + | 10    |
| Congestion                         |   |   |   |   |   | 2 |   |   |   |   | 1 2.0 |
| Inflammation, Granulomatous, Focal |   |   |   |   |   | 1 |   |   | 1 | 2 | 3 1.3 |
| Pancreas                           | + | + | + | + | + | + | + | + | + | + | 10    |
| Salivary Glands                    | + | + | + | + | + | + | + | + | + | + | 10    |
| Stomach, Forestomach               | + | + | + | + | + | + | + | + | + | + | 10    |
| Stomach, Glandular                 | + | + | + | + | + | + | + | + | + | + | 10    |

**Cardiovascular System**

|                |   |   |   |   |   |   |   |   |   |     |    |
|----------------|---|---|---|---|---|---|---|---|---|-----|----|
| Heart          | + | + | + | + | + | + | + | + | + | +   | 10 |
| Cardiomyopathy |   |   |   |   | 1 |   |   |   | 1 | 1.0 |    |
| Hemorrhage     |   |   |   |   | 1 |   |   | 1 | 2 | 1.0 |    |

**Endocrine System**

|                |   |   |   |   |   |   |   |   |   |   |    |
|----------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | 10 |
|----------------|---|---|---|---|---|---|---|---|---|---|----|

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 90004-05

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Propylene glycol mono-t-butyl ether

CAS Number: 57018-52-7

Date Report Requested: 10/22/2014

Time Report Requested: 15:03:28

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
CONTROL**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

**\*TOTALS**

|                    |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Medulla    | + | + | + | + | + | I | + | + | + | + | + | 9  |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Parathyroid Gland  | + | M | + | + | + | + | + | + | + | + | M | 8  |
| Pituitary Gland    | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Thyroid Gland      | + | M | + | + | + | + | + | + | + | + | + | 9  |

**General Body System**

NONE

**Genital System**

|                |   |   |   |   |   |   |   |   |   |   |   |       |
|----------------|---|---|---|---|---|---|---|---|---|---|---|-------|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Ovary          | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Cyst           |   |   |   |   |   | 1 |   |   |   |   |   | 1 1.0 |
| Uterus         | + | + | + | + | + | + | + | + | + | + | + | 10    |

**Hematopoietic System**

|                                    |   |   |   |   |   |   |   |   |   |   |   |       |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|-------|
| Bone Marrow                        | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Lymph Node, Bronchial              | + | + | + | M | + | + | + | + | + | + | M | 8     |
| Lymph Node, Mandibular             | + | + | + | M | + | + | + | M | + | + |   | 8     |
| Lymph Node, Mediastinal            | + | + | + | + | + | + | + | + | M | M |   | 8     |
| Lymph Node, Mesenteric             | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Inflammation, Granulomatous, Focal | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 |   |   | 9 1.3 |
| Spleen                             | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Thymus                             | + | + | + | + | + | + | + | + | + | + | + | 10    |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal    3) Moderate  
 2) Mild        4) Marked

Experiment Number: 90004-05

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Propylene glycol mono-t-butyl ether

CAS Number: 57018-52-7

Date Report Requested: 10/22/2014

Time Report Requested: 15:03:28

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
CONTROL**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |         |
|-------------|---|---|---|---|---|---|---|---|---|---------|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
| 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
| 9           | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9       |
| 2           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2       |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
| 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
| 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1       |
| 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1       |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | *TOTALS |

**Integumentary System**

|               |   |   |   |   |   |   |   |   |   |   |    |
|---------------|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Skin          | + | + | + | + | + | + | + | + | + | + | 10 |

**Musculoskeletal System**

|      |   |   |   |   |   |   |   |   |   |   |    |
|------|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | 10 |
|------|---|---|---|---|---|---|---|---|---|---|----|

**Nervous System**

|       |   |   |   |   |   |   |   |   |   |   |    |
|-------|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | 10 |
|-------|---|---|---|---|---|---|---|---|---|---|----|

**Respiratory System**

|                              |   |   |   |   |   |   |   |   |   |   |       |
|------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Larynx                       | + | + | + | + | + | + | + | + | + | + | 10    |
| Lung                         | + | + | + | + | + | + | + | + | + | + | 10    |
| Inflammation, Chronic, Focal |   |   |   | 1 |   |   |   | 1 | 1 |   | 3 1.0 |
| Nose                         | + | + | + | + | + | + | + | + | + | + | 10    |
| Trachea                      | + | + | + | + | + | + | + | + | + | + | 10    |

**Special Senses System**

NONE

**Urinary System**

|                            |   |   |   |   |   |   |   |   |   |   |       |
|----------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Kidney                     | + | + | + | + | + | + | + | + | + | + | 10    |
| Renal Tubule, Regeneration | 1 |   |   |   |   |   |   |   |   |   | 1 1.0 |
| Urinary Bladder            | + | + | + | + | + | + | + | + | + | + | 10    |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 90004-05

**Test Type:** 90-DAY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Propylene glycol mono-t-butyl ether

**CAS Number:** 57018-52-7

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 15:03:28

**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Female  
75 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

NONE

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

**Experiment Number:** 90004-05

**Test Type:** 90-DAY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Propylene glycol mono-t-butyl ether

**CAS Number:** 57018-52-7

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 15:03:28

**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Female  
75 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Respiratory System**

Nose

+ + + + + + + + + + 10

**Special Senses System**

NONE

**Urinary System**

Kidney

+ + + + + + + + + + 10

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

**Experiment Number:** 90004-05

**Test Type:** 90-DAY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Propylene glycol mono-t-butyl ether

**CAS Number:** 57018-52-7

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 15:03:28

**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Female  
150 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

Liver

+

1

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

Ovary

+

1

Cyst

1 2.0

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

**Experiment Number:** 90004-05

**Test Type:** 90-DAY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Propylene glycol mono-t-butyl ether

**CAS Number:** 57018-52-7

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 15:03:29

**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Female  
150 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

NONE

**Respiratory System**

Nose

+ + + + + + + + + + 10

Respirat Epith, Hyperplasia

2 1 2.0

**Special Senses System**

NONE

**Urinary System**

Kidney

+ + + + + + + + + + 10

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 90004-05

**Test Type:** 90-DAY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Propylene glycol mono-t-butyl ether

**CAS Number:** 57018-52-7

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 15:03:29

**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Female  
300 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

Liver

+ + 2

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

**Experiment Number:** 90004-05

**Test Type:** 90-DAY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Propylene glycol mono-t-butyl ether

**CAS Number:** 57018-52-7

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 15:03:29

**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Female  
300 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Respiratory System**

|                                      |   |   |   |   |   |   |   |   |   |   |       |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Nose                                 | + | + | + | + | + | + | + | + | + | + | 10    |
| Olfactory Epi, Degeneration, Hyaline |   |   |   | 1 |   |   |   |   |   |   | 1 1.0 |

**Special Senses System**

NONE

**Urinary System**

|                            |   |   |   |   |   |   |   |   |   |   |       |
|----------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Kidney                     | + | + | + | + | + | + | + | + | + | + | 10    |
| Renal Tubule, Regeneration |   |   |   |   | 1 |   |   |   |   |   | 2 1.0 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 90004-05

**Test Type:** 90-DAY

**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Propylene glycol mono-t-butyl ether

**CAS Number:** 57018-52-7

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 15:03:29

**First Dose M/F:** NA / NA

**Lab:** BNW

**F 344/N Rat Female  
600 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

\*TOTALS

**Alimentary System**

Liver

+

1

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 90004-05

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Propylene glycol mono-t-butyl ether

CAS Number: 57018-52-7

Date Report Requested: 10/22/2014

Time Report Requested: 15:03:29

First Dose M/F: NA / NA

Lab: BNW

F 344/N Rat Female  
600 PPM

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9           | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 2           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9           | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1           | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |   |

\*TOTALS

Respiratory System

|                                      |   |   |   |   |   |   |   |   |   |    |     |
|--------------------------------------|---|---|---|---|---|---|---|---|---|----|-----|
| Lung                                 | + |   |   |   |   |   |   |   |   | 1  |     |
| Serosa, Fibrosis                     | 1 |   |   |   |   |   |   |   |   | 1  | 1.0 |
| Nose                                 | + | + | + | + | + | + | + | + | + | 10 |     |
| Olfactory Epi, Degeneration, Hyaline | 1 | 1 | 1 | 1 | 1 | 1 |   |   | 1 | 7  | 1.0 |

Special Senses System

|                |  |  |  |  |  |  |  |   |   |     |
|----------------|--|--|--|--|--|--|--|---|---|-----|
| Eye            |  |  |  |  |  |  |  | + | 1 |     |
| Mineralization |  |  |  |  |  |  |  | 1 | 1 | 1.0 |

Urinary System

|                            |   |   |   |   |   |   |   |   |   |    |     |
|----------------------------|---|---|---|---|---|---|---|---|---|----|-----|
| Kidney                     | + | + | + | + | + | + | + | + | + | 10 |     |
| Renal Tubule, Regeneration |   | 1 | 1 |   | 1 |   |   |   |   | 3  | 1.0 |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 90004-05

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Propylene glycol mono-t-butyl ether

CAS Number: 57018-52-7

Date Report Requested: 10/22/2014

Time Report Requested: 15:03:29

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
1200 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

**\*TOTALS****Alimentary System**

|                           |   |   |   |   |   |   |   |   |   |   |    |
|---------------------------|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Rectum   | + | + | + | M | + | + | + | + | + | + | 9  |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Ileum    | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Jejunum  | + | + | + | + | + | + | + | + | + | + | 10 |
| Liver                     | + | + | + | + | + | + | + | + | + | + | 10 |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | 10 |

**Cardiovascular System**

|                |   |   |   |   |   |   |   |   |   |   |       |
|----------------|---|---|---|---|---|---|---|---|---|---|-------|
| Blood Vessel   | + |   |   |   |   |   |   |   |   |   | 1     |
| Heart          | + | + | + | + | + | + | + | + | + | + | 10    |
| Cardiomyopathy | 1 |   | 1 |   |   |   |   |   |   |   | 2 1.0 |
| Hemorrhage     |   |   | 1 |   | 1 |   |   |   |   |   | 2 1.0 |

**Endocrine System**

|                 |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex  | + | + | + | + | + | + | + | + | + | + | 10 |
| Adrenal Medulla | I | + | + | + | + | + | + | + | + | + | 9  |

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal    3) Moderate  
2) Mild        4) Marked

Experiment Number: 90004-05

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Propylene glycol mono-t-butyl ether

CAS Number: 57018-52-7

Date Report Requested: 10/22/2014

Time Report Requested: 15:03:29

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
1200 PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

**\*TOTALS**

|                    |   |   |   |   |   |   |   |   |   |   |    |
|--------------------|---|---|---|---|---|---|---|---|---|---|----|
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | 10 |
| Parathyroid Gland  | + | + | + | + | + | M | + | + | M | + | 8  |
| Pituitary Gland    | + | + | + | + | + | + | + | + | + | + | 10 |
| Thyroid Gland      | + | + | + | + | + | + | + | + | + | + | 10 |

**General Body System**

NONE

**Genital System**

|                |   |   |   |   |   |   |   |   |   |   |    |
|----------------|---|---|---|---|---|---|---|---|---|---|----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Ovary          | + | + | + | + | + | + | + | + | + | + | 10 |
| Uterus         | + | + | + | + | + | + | + | + | + | + | 10 |

**Hematopoietic System**

|                                    |   |   |   |   |   |   |   |   |   |   |     |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|-----|
| Bone Marrow                        | + | + | + | + | + | + | + | + | + | + | 10  |
| Lymph Node, Bronchial              | + | + | M | + | + | + | + | + | M | + | 8   |
| Lymph Node, Mandibular             | + | + | + | + | + | + | + | + | + | + | 10  |
| Lymph Node, Mediastinal            | + | M | M | + | + | M | + | + | M | + | 6   |
| Lymph Node, Mesenteric             | + | + | + | + | + | + | + | + | + | + | 10  |
| Inflammation, Granulomatous, Focal |   |   |   | 1 | 1 | 1 | 1 | 1 |   | 5 | 1.0 |
| Spleen                             | + | + | + | + | + | + | + | + | + | + | 10  |
| Thymus                             | + | + | + | + | + | + | + | + | + | + | 10  |

**Integumentary System**

|               |   |   |   |   |   |   |   |   |   |   |    |
|---------------|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | 10 |
|---------------|---|---|---|---|---|---|---|---|---|---|----|

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal    3) Moderate  
2) Mild        4) Marked

Experiment Number: 90004-05

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Propylene glycol mono-t-butyl ether

CAS Number: 57018-52-7

Date Report Requested: 10/22/2014

Time Report Requested: 15:03:29

First Dose M/F: NA / NA

Lab: BNW

**F 344/N Rat Female  
1200 PPM**

| DAY ON TEST | 0 0 0 0 0 0 0 0 0 0 |                     |                     |                     |                     |                     |                     |         |  |  |
|-------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------|--|--|
|             | 0 0 0 0 0 0 0 0 0 0 |                     |                     |                     |                     |                     |                     |         |  |  |
| ANIMAL ID   | 9 9 9 9 9 9 9 9 9 9 | 2 2 2 2 2 2 2 2 2 2 | 0 0 0 0 0 0 0 0 0 0 | 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 | 0 0 0 0 0 0 0 0 0 0 | 1 2 3 4 5 6 7 8 9 0 | *TOTALS |  |  |
|             | 0 0 0 0 0 0 0 0 0 0 | 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 | 0 0 0 0 0 0 0 0 0 0 | 1 1 1 1 1 1 1 1 1 1 | 0 0 0 0 0 0 0 0 0 0 | 1 2 3 4 5 6 7 8 9 0 | *TOTALS |  |  |

|               |   |   |   |   |   |   |   |   |   |   |    |
|---------------|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Skin          | + | + | + | + | + | + | + | + | + | + | 10 |

**Musculoskeletal System**

|      |   |   |   |   |   |   |   |   |   |   |    |
|------|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | 10 |
|------|---|---|---|---|---|---|---|---|---|---|----|

**Nervous System**

|       |   |   |   |   |   |   |   |   |   |   |    |
|-------|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | 10 |
|-------|---|---|---|---|---|---|---|---|---|---|----|

**Respiratory System**

|                                      |   |   |   |   |   |   |   |   |   |   |        |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Larynx                               | + | + | + | + | + | + | + | + | + | + | 10     |
| Lung                                 | + | + | + | + | + | + | + | + | + | + | 10     |
| Inflammation, Chronic, Focal         |   |   |   |   | 1 |   | 1 |   | 1 |   | 3 1.0  |
| Nose                                 | + | + | + | + | + | + | + | + | + | + | 10     |
| Olfactory Epi, Degeneration, Hyaline | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 10 1.9 |
| Trachea                              | + | + | + | + | + | + | + | + | + | + | 10     |

**Special Senses System**

NONE

**Urinary System**

|                            |   |   |   |   |   |   |   |   |   |     |    |
|----------------------------|---|---|---|---|---|---|---|---|---|-----|----|
| Kidney                     | + | + | + | + | + | + | + | + | + | +   | 10 |
| Renal Tubule, Regeneration |   |   |   |   |   | 1 |   |   | 1 | 1.0 |    |
| Urinary Bladder            | + | + | + | + | + | + | + | + | + | +   | 10 |

\*\* END OF REPORT \*\*

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked